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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,292	02/27/2004	James Albert Brenton	024777.0139PTUS	7617

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IP Department
Patton Boggs, LLP
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EXAMINER

KANE, CORDELIA P

ART UNIT	PAPER NUMBER
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2132

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/789,292

Applicant(s)

BRENTON ET AL.

Examiner

Cordelia Kane

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks, filed June 29, 2007, with respect to the rejections of claims 1 – 18 and 20 – 22 under 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made in view of Kelly in view of Woolston and also He in view of Woolston.
2. Applicants arguments with regard to claims 19, 23 and 24 are not persuasive. Referring to claim 19, He teaches selecting a modem from a modem pool. There is a list of multiple network elements or modems to select from (column 14, lines 56-68). The network element is selected and that selection is sent from one server to the other (column 14, lines 59-63). Therefor the one modem is selected from a pool of modems.
3. Referring to claims 23 and 24, the rejection in view of Kelly in view of He still stands. The amendments to claims 1 and 6 necessitated a new grounds of rejection, but for the unamended system of claims 23 and 24 Kelly in view of He still teaches all of the elements of the claims.

Claim Objections

4. Claims 8 and 10 depend from claim 7 which no longer exists. It is assumed for the purpose of examination that these claims were intended to depend from claim 6.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1 – 5, and 11 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over He, and further in view of Thomas Woolston's US Patent 5,845,265. Referring to claim 1, He discloses:

- a. A first server (security server) operable to:
 - i. Receive a request to communicate with one or more network elements (column 4, lines 9-11),
 - ii. Authenticate a user (column 4, lines 25-26),
 - iii. Facilitate a session with a second server (secure terminal server) that connects to a network element (column 14, lines 60-65),
 - iv. Establish a secure pathway over a communications network (column 5, lines 30-32),

- v. Transmit data for monitoring system functions (column 5, line 50)
 - b. A plurality of modems coupled in communication with both servers (column 4, line 42) and operable to authenticate a request to access remote network elements (column 15, lines 19-21) and to communicate operational status (column 5, line 53).
- 8. He does not explicitly disclose a modem bank between the network elements and the server. However, Woolston discloses that a modem bank is the most secure form for posting to remote terminals (column 19, lines 24-26). He and Woolston are analogous art because they are from the same field of endeavor, remote terminal communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of He and Woolston before him or her, to modify the network of He to include the modem bank of Woolston. The motivation for doing so would have been that a modem bank is the most secure way to connect off-line (column 19, lines 24-26).
- 2. Referring to claim 2, He teaches the second server operable to select a specific modem (column 15, lines 1-2).
- 3. Referring to claim 3, He teaches that the first server is able to log invalid login attempts (column 5, lines 49-50).
- 4. Referring to claim 4, He teaches that the first server is capable of allowing specific access to privileged users (column 8, lines 51-52).
- 5. Referring to claim 5, He teaches that the second server acts as a centralized modem bank (column 4, lines 43-45).

6. Referring to claim 11, He teaches:
 - c. Receiving a first request via an out-of-band process to establish a connection with a network element (column 4, lines 57-60).
 - d. Receiving a security identifier to authenticate the request (column 5, lines 8-9)
 - e. Identifying a dial up number for accessing the remote modem is inherent from the servers ability to connect with the remote modem. If the server did not have the number to connect then it would not be able to connect.
 - f. Capturing information about the first request to a log file (column 5, lines 49-51).
 - g. Directing a server to identify which of the plurality of modems to connect with to access the requested network element (column 14, lines 60-61).
 - h. Authenticating a second request to access the remote modem (column 14, lines 64-67).
 - i. Authenticating a third request to access the network element (column 15, lines 1-2).
9. He does not explicitly disclose a modem bank between the network elements and the server. However, Woolston discloses that a modem bank is the most secure form for posting to remote terminals (column 19, lines 24-26). He and Woolston are analogous art because they are from the same field of endeavor, remote terminal communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of He and Woolston before him or her, to

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modify the network of He to include the modem bank of Woolston. The motivation for doing so would have been that a modem bank is the most secure way to connect off-line (column 19, lines 24-26).

7. Referring to claim 12, He teaches establishing a communications pathway after exchanging packets (tickets) of information (column 14, lines 59-67).

8. Referring to claim 13, He teaches issuing a command to the network element to authenticate the access (column 15, lines 7-21).

9. Referring to claim 14, He teaches that the identifier is a security credential component (column 5, lines 8-9).

10. Referring to claim 15, He teaches

j. Issuing a request from the user (column 14, line 59).

k. Receiving a telephone number for dialing is not specifically mentioned in the specification. But it is inherent that the number for dialing would be needed to connect to the specified element. He teaches connecting with the specified element (column 15, line 4-5).

l. Validating the telephone number against a predetermined list is not specifically taught. But it is taught that the element that user is attempting to access is checked against a predetermined list (column 5, lines 16-17). Since the element is a modem it would be inherent that this list would be phone numbers.

11. Referring to claim 16, He teaches capturing session information (column 5, lines 49 – 51).

12. Referring to claim 17, He teaches logging logon successes and failures (column 5, line 50).
13. Referring to claim 18, He teaches logging information as to the user identifier and time of attempt (column 5, lines 52-53).
14. Referring to claim 19, He teaches
 - m. Sending a request to establish a connection with a remote modem (column 14, line 59).
 - n. Selecting a modem from the modem pool, and receiving a response from said server to establish a link with said pooled modem. This is taught in the ticket that is returned to the secure server. It is not only the response but it includes the server that is selected to connect to (column 14, lines 59-63).
 - o. Dialing a telephone number to said pooled modem to establish a link. It is inherent that this number is dialed because the server is able to establish a connection with the remote modem (column 15, lines 4-5).
15. Referring to claim 20, He teaches that authenticating the request includes:
 - p. Receiving login identification information (column 14, 60-64).
 - q. Verifying the login information against a list of authorized users (column 5, lines 9-10).
 - r. Notifying the user with a status response (column 9, lines 32-33).
16. Referring to claim 21, He teaches that the user information is a username and password (column 14, lines 61-62).

17. Referring to claim 22, He teaches that the status response is an approval to access said remote modem (column 9, lines 32-33).

18. Claims 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly, and further in view of Woolston. Referring to claim 6, Kelly teaches:

s. Requesting access from a first network device out of band access to a second network device (router) via a modem, communicating from said first network device with the remote modem coupled to said second network element, and authenticating a request to access the remote modem (column 8, lines 45-49)

10. Kelly does not explicitly disclose a modem bank. However, Woolston discloses that a modem bank is the most secure form for posting to remote terminals (column 19, lines 24-26). He and Woolston are analogous art because they are from the same field of endeavor, remote terminal communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of He and Woolston before him or her, to modify the network of He to include the modem bank of Woolston. The motivation for doing so would have been that a modem bank is the most secure way to connect off-line (column 19, lines 24-26).

19. Referring to claim 10, Kelly teaches encrypting communicated data to secure network connections (column 8, line 67 – column 9, lines 1-3).

20. Claims 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly in view of Woolston as applied to claims 6 and 10 above, and further in view of He. Referring to claim 8, Kelly in view of Woolston teaches the limitations of parent claim 7. It fails to teach the limitation of validating the number dialed to establish that the requesting modem is authorized to connect. In the specification it is explained this is so only the modem banks will be able to access the network elements. While validating the number is not expressly established in the prior art, He does teach that only the secure terminal server acts as a bridge between the network and the remote elements. It would have been obvious to modify Kelly in view of Woolston so that the actions that are performed individually at each node be centralized into individual servers, as taught by He.

21. Referring to claim 9, Kelly in view of Woolston and further in view of He teach the limitations of parent claim 8. Kelly goes on to teach using credentials for authentication (column 8, 29-34).

22. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly, and further in view of He. Referring to claim 23, Kelly teaches:

t. A server programmed to receive one or more requests from a user to access said remote device and authenticate that said one or more requests are submitted by an authorized user (column 8, lines 45-49).

u. Wherein said remote modem is coupled to said remote device (Figure 1, Elements 40 and 68)

23. Kelly does not explicitly disclose a modem bank or only accepting communications from a predetermined set of phone numbers. However, He discloses:

v. A modem bank (secure terminal server, column 4, lines 43-45) communicatively coupled to said server and to a remote modem (Figure 3, Elements 15 and 20).

w. Only the secure terminal server acts as a bridge between the network and the remote elements and is therefor predetermined (column 4, lines 43-45).

24. Kelly and He are analogous art because they are from the same field of endeavor, remote terminal communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Kelly and He before him or her, to modify Kelly to include the modem bank of He. The motivation for doing so would have been to provide a single sign on capability that keeps the system secure on a network wide basis (He, column 2, lines 25-28).

25. Referring to claim 24, He teaches a system (column 1, lines 7-10) that only allows access to users that are able to log on following the device prompts (column 15, lines 19-20).

Conclusion

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cordelia Kane whose telephone number is 571-272-7771. The examiner can normally be reached on Monday - Thursday 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CPK

Cordelia Kane
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